Fig. 1a:

CH₃

Fig. 1b:

$$(CH_3)_2N \longrightarrow O \longrightarrow Dabcyl$$

$$CH_3 \longrightarrow O -(CH_2)_{2.6} -O \longrightarrow Dabcyl$$

$$Psoralen$$

Fig. 2a:

Fig. 2b:

Fig. 4a:

Fig. 4b:

Biotin phosphoramidit 5 (monofunctional)

Biotin phosphoramidit 6 (bifunctional)

Fig. 4c:

Fig. 4d:

Aminomodifier-5 phosphoramidit 12

$$\mathsf{Mmt} - \mathsf{N} \longrightarrow \mathsf{O} - \mathsf{P} \stackrel{\mathsf{O}}{\longrightarrow} \mathsf{CN}$$

Aminomodifier-C6 phosphoramidit 13

Fig. 5b:

F

Fig. 6:

DABCYL support 6

Fig. 7:

Fig. 8:

$$\mathsf{Mmt-O} = \mathsf{PG} \mathsf{PG}$$

1.3% TCA in DCM

2. Tetrazol + NC P C₁₆H₃

3. Oxidation I₂/H₂O